Assessing Reading Ability

- Illiteracy is hard to detect because people are ashamed and cover it up. Most people with limited literacy are masters of concealment! Be non-threatening in your approach.

- Mental and visual acuity, physical disorders, advanced age, and medications that disrupt the ability to concentrate and see affect reading ability.

- Asking a patient how far they went in school is not always a good indicator of reading ability. Most people who can’t read have been through the 10th grade, because they must attend school until they can legally drop out, usually at age 16. Most research shows a 2 to 5 year gap between grade level and reading ability. Often a person’s oral communication is better than their reading, however, these individuals do have a limited vocabulary.

- Some general comments or questions to broach the subject of reading problems may include:

  Q: Do you like to read?

  Q: Medical terms are complicated and many people find the words difficult to understand. Do you ever get help from others in filling out forms, reading prescription labels, insurance forms, and health education sheets?

  Q: “A lot of people have trouble reading and remembering health information because it is difficult. Is this ever a problem for you?”

  Q: What do you like to read? (Newspapers are 10th grade reading level and news magazines are at 12th grade)

  Q: How often do you read? How much time do you spend reading each day?

  Q: When you have to learn something new or unfamiliar to you, what ways do you prefer to learn the information? Do you like to read, watch TV or videotape, listen to tapes or CDs, use the computer, talk to other people, or practice how to do something?
Q: How happy are you with the way you read?

Q: Ask patient to read prescription bottle and explain how to take their medicines

A research study on identifying patients with inadequate health literacy, found the following 3 questions to be an effective screening tool

1. “How often do you have somebody help you read hospital materials?”
2. “How confident are you filling out medical forms by yourself?”
3. “How often do you have problems learning about your medical condition because of difficulty understanding written information?”

These questions were weaker for identifying patients with marginal health literacy.

• Clues to Low Literacy:
  - React to complex learning situations by withdrawal / avoidance
  - Use excuses of being too tired, too busy, not interested, not feeling well
  - Show signs of frustration when trying to read
  - Have difficulty following directions
  - Become anxious when asked to read
  - Listen and watch attentively to try to memorize information
  - Don’t ask questions
  - Ask someone to read information for them
  - Act confused or talk out of context about the information
  - There is a discrepancy between what they hear and what is written
  - Insist on reading the information at home or with spouse/friend present
  - Resist filling out forms or reading material you give him.
  - Resists changes in routine. Functionally illiterate people learn to cope by following same routine and using same services all the time

• Reading Skills Test

REALM (Rapid Estimate of Adult Literacy in Medicine)
  - Measures person’s ability to read and pronounce medical and health-related vocabulary from 3 lists graduated from the most simple to the most complex words.
  - Example:
A list of 66 written words in 3 columns is given to the patient.

- List 1 – fat, flu, pill, dose, eye, stress, smear, nerves
- List 2 – fatigue, pelvic, jaundice, infection, exercise, behavior, prescription, notify
- List 3 – allergic, menstrual, testicle, colitis, emergency, medication, occupation, sexuality

- A list of 66 written words in 3 columns is given to the patient.
- Explain that you only want to get an idea of how best to provide information. Ask patient to read as many words aloud as they can from list 1. If the patient cannot read a word, say blank and go to next word.
- This test only takes a few minutes to administer.
- Count as an error any word not attempted or mispronounced.
- Record the number of correct words for each list in the scoring box.
- Total the numbers of correctly read words in each list, and match the total score with the grade equivalent in the scoring chart.

Grade Range Estimates:
- 0-18 = 3rd grade and below. May not be able to read most low-literacy materials. May need repeated oral instructions, materials made mostly of illustrations, or audio or videotapes.
- 19-44 = 4th to 6th grade. May need low literacy materials; may not be able to read prescription labels
- 45-60 = 7th to 8th grade. May struggle with most currently available patient education materials
- 61-66 = 9th grade and above. Should be able to read most patient education materials

• Comprehension Skill Tests

Listening Test
- Select a short passage of not more than one page from currently used health material that has been tested for the readability level
- Prepare the patient that questions on the material will be asked
- Ask the patient to read the passage
- Ask the patient 3-5 detailed questions about the content of the passage
- Percentage of correct answers = # right divided by # possible right
- 80% = easy material; 70% about right, but may need help to fully understand; less than 70% = too difficult for effective use

TOFHLA (Test of Functional Health Literacy in Adults)
Reading Comprehension Test
- Reading comprehension test consists of 50 items. Passages are selected from instructions for preparation for an upper GI series, the patient rights and responsibilities section of a Medicaid application
form, and a standard hospital informed consent. The 3 passages are ordered by increasing difficulty on the Gunning Fog Index from grades 4.3, 10.4, and 19.5 respectively.

- The instructions are in sentences that have some of the words missing. Where a word is missing, a blank line is drawn, and 4 possible words that could go in the blank appear below it. The patient is asked to figure out which of those 4 words should go in the blank to make the sentence make sense.

  Example: Your doctor has sent you to have a _________ X-ray.
  stomach  diabetes  stitches  germs

Numeracy Comprehension Test
- The 17 test items for numerical ability reproduce real-life situations in receiving, following, and paying for medication plans. They are arranged in increasing levels of difficulty. The prompts consist of prescription bottles, an appointment slip, a chart describing eligibility for financial aid, and an example of results from a medical test.

  Example: Medication Prescription on Bottle:
  GARFIELD IM 16 Apr 93
  FF941858  Dr. Lubin, Michael
  PENICILLIN VK
  250 MG 40/0
  Take one tablet by mouth
  four times a day

Patients are asked questions with this prompt: If you take your first tablet at 7:00 am, when should you take the next one? And the next one after that? What about the last one of the day, when should you take that one?

- Both sections take a total of 22 minutes to administer.

- A short version of the TOFHLA (S-TOFHLA) is available, which takes 12 minutes to administer.

The Newest Vital Sign (NVS)

A quick and accurate screening test for limited literacy in primary care settings was introduced by Dr. B. Weiss and colleagues in the November 2005 issue of Annals of Family Medicine. The Newest Vital Sign is a nutrition label that is accompanied by 6 questions and takes 3 minutes to administer. Patients with
more than 4 correct responses are unlikely to have low literacy, whereas fewer than 4 correct answers indicate the possibility of limited literacy.

It has reliability and correlates with the TOFHLA. There is also a Spanish version of the tool.

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